

## **CERR Update, July, 2003**

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### **What is the NEI?**

The National Emission Inventory (NEI) is the US EPA's emission inventory database. It is prepared with input from numerous State and local air agencies. These data are used for air dispersion modeling, regional strategy development, regulation setting, air toxics risk assessment, and tracking trends in emissions over time. The 1999 and 1996 inventory data are available.

### **What is the CERR?**

The Consolidated Emissions Reporting Rule (CERR) is a US EPA regulation that establishes standards and reporting schedules for the reporting of criteria pollutant emission inventories. Pollutants included in CERR regulations are VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, and NH<sub>3</sub>. States must submit data for point, area, mobile, and biogenic sources. Except for annual submittals of large point source data, inventories are to be submitted every 3 years, with the first submittal due in 2004. When first proposed in 2000, the CERR was intended to address both criteria and toxic inventories. Toxic inventories were removed from the final regulation due to comments from states. EPA intends to develop toxic inventory submittal regulations at a later time. The CERR was finalized in August, 2002.

### **What is the difference?**

The NEI is the database (like CEIDARS is the ARB database), the CERR is the rule (like the ARB's guidance) that requires states to submit to data to the NEI.

### **Who submits to the NEI?**

States, tribes, and a few local entities in states like Nevada and Arizona. The ARB submits districts data to the US EPA; districts and facilities do not submit NEI data directly to the US EPA. (some facilities do submit inventory data under other programs however).

### **When is data submitted?**

Statewide, ARB will be submitting approximately 50 large point sources to the EPA annually. Every three years, all inventory data, including area-wide, mobile source, and biogenic data, will be submitted by the ARB. The first such submittal is due June 1, 2004.

### **When can I look at the NEI data for my district?**

The 1996 and the 1999 data is available now at <http://www.epa.gov/ttn/chief/eiinformation.html>. For the inventory that will be submitted in June, 2004, the first opportunity to review it will probably be in January, 2005.

### **Why is the NEI so different from CEIDARS?**

The US EPA uses state data as just **one** source of data for the NEI. US EPA supplements or even replaces ARB data for some categories and pollutants. For example, all power plant point source data is replaced with CEM data from EPA's acid rain monitoring system. Any categories without emissions will result in the US EPA adding this data.

### **What point source data is submitted?**

Under the CERR, a facility can be a Type A source, a Type B source, or exempt because its emissions are below the minimum reporting thresholds. For Type A sources, the minimum reporting thresholds are 2500 tons per year (tpy) for SO<sub>x</sub>, NO<sub>x</sub>, and CO, and 250 tpy for VOC, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub>. Type A sources are a subset of Type B sources. For type B sources in attainment areas, the reporting thresholds are 1000 tpy for CO, 100 tpy for SO<sub>x</sub>, VOC, PM<sub>10</sub>, PM<sub>2.5</sub>, and NH<sub>3</sub>, and 5 tpy for Lead. For Type B sources in nonattainment areas, the minimum reporting thresholds are lower and vary depending on the nonattainment area status. Type A sources are to be submitted annually beginning June 1, 2003; Type B sources are to be submitted every 3 years, beginning June 1, 2004. Based on a review of the 2000 CEIDARS database, of the 11,824 CEIDARS facilities in California that emit criteria pollutants, 51 facilities are Type A sources; 200 are Type B sources in attainment areas, and 527 are Type B sources in non-attainment sources. Most of the non-attainment sources are in the South Coast Air Basin due to its "extreme" ozone non-attainment status.

Table 1 shows the fields required for both Type A and Type B facilities.

| Field                                      | Type A | Type B |
|--|--------|--------|
| 1. Inventory year                          | X      | X      |
| 2. Inventory start date                    | X      | X      |
| 3. Inventory end date                      | X      | X      |
| 4. Inventory type                          | X      | X      |
| 5. State FIPS code                         | X      | X      |
| 6. County FIPS code                        | X      | X      |
| 7. Facility ID code                        | X      | X      |
| 8. Point ID code                           | X      | X      |
| 9. Process ID code                         | X      | X      |
| 10. Stack ID code                          | X      | X      |
| 11. Site name                              | X      | X      |
| 12. Physical address                       | X      | X      |
| 13. SCC or PCC                             | X      | X      |
| 14. Heat content (fuel) (annual average)   | X      | X      |
| 15. Ash content (fuel) (annual average)    | X      | X      |
| 16. Sulfur content (fuel) (annual average) | X      | X      |
| 17. Pollutant code                         | X      | X      |
| 18. Activity/throughput (annual)           | X      | X      |
| 19. Activity/throughput (daily)            | X      | X      |
| 20. Work weekday emissions                 | X      | X      |
| 21. Annual emissions                       | X      | X      |
| 22. Emission factor                        | X      | X      |
| 23. Winter throughput (%)                  | X      | X      |
| 24. Spring throughput (%)                  | X      | X      |
| 25. Summer throughput (%)                  | X      | X      |
| 26. Fall throughput (%)                    | X      | X      |
| 27. Hr/day in operation                    | X      | X      |
| 28. Start time (hour)                      | X      | X      |
| 29. Day/wk in operation                    | X      | X      |
| 30. Wk/yr in operation                     | X      | X      |
| 31. X stack coordinate (latitude)          |        | X      |
| 32 Y stack coordinate (longitude)          |        | X      |
| 33 Stack Height                            |        | X      |
| 34 Stack diameter                          |        | X      |
| 35 Exit gas temperature                    |        | X      |
| 36 Exit gas velocity                       |        | X      |
| 37 Exit gas flow rate                      |        | X      |
| 38 SIC/NAICS                               |        | X      |
| 39 Design capacity                         |        | X      |
| 40 Maximum nameplate capacity              |        | X      |
| 41 Primary control eff (%)                 |        | X      |

Note that "Emission Release Points" (ERPs) are **required** to report any emissions to the NEI; if your facility does not have a stack, ARB will be forced to generate a placeholder ERP for you and tag it as a fugitive source in the ERP type field, which is a required field. If ARB generates a ERP, no stack parameters will be transmitted, of course. If and when the default stack system

is implemented, ARB may choose to use this system to generate default stacks where district stack data is not available.

### **What non-point data is submitted?**

All area, onroad, offroad and natural source data will be submitted to the EPA in June, 2004. However, the US EPA categorizes non-point source data using Area and Mobile Source SCC codes. (They used to be called "AMS" codes). Since the ARB uses its own EIC codes, the ARB sums up EIC data by AMS codes using a lookup table. This difference in categorization means that direct comparison of US EPA estimates and ARB estimates is not possible without extensive reprocessing of ARB inventory data. For mobile sources, the ARB not only sums up as many as 50 EICs into one AMS category, but it has to in turn disaggregate this data into emissions by road type.

### **How is the ARB's submittal QA'ed?**

The ARB uses EPA's QA software to check for formatting problems when it submits data, and then it checks the NEI as new versions are released. The ARB submits updates when opportunities arise. CEIDARS contains many "widow" (i.e., facilities without emissions) and "orphan" (i.e. stacks without facilities) records, and these will be removed before next year's submittal. For Type A or Type B facilities, the ARB may contact districts when CERR required fields(see Table 1) are missing or incorrect (such as SIC and SCC) to supply missing or incorrect data.

### **Why do I care?**

The US EPA publishes NEI data in a very high profile web site and is extensively used by many. EPA has already used 1999 NEI criteria data to speciate a toxics assessment called the National Air Toxics Assessment (NATA). NEI data is used as the basis of SIP negotiations, so it is imperative that ARB and districts cooperate to ensure that the NEI data is as correct and as current as possible. Failure to supply CERR-required data can potentially result in loss of federal funds.

It is also in the ARB's and district's interest to supply NEI data because any data NOT submitted may be replaced with data generated by the EPA or its contractors. It is imperative that state and local authorities retain control of this data.